Additional file 4: Additional data tables

Table 3.1 Logistic regression to predict recruitment into HAPPY trial (N=189 with complete data)

Variable	Odds Ratio (95% Confidence interval
Maternal age at screening	0.99 (0.93, 1.06)
Gestational age at screening	0.94 (0.86, 1.02)
Parity	1.01 (0.81, 1.27)
Body Mass Index at booking	1.00 (0.94, 1.07)
Ethnicity	
South Asian origin (reference)	1
White British	***0.48 (0.22, 0.85)****
Other ethnicity	1.21 (0.53, 2.79)

Note: * p<.05

Table 3.2 Multivariable regression to predict attendance at intervention sessions (intervention group only, N=53 with complete data)

Variable	β (95% confidence interval)
Maternal age at screening	0.16 (-0.02-0.35)
Gestational age at screening	-0.01 (-0.21-0.19)
Parity	-0.25 (-0.92 – 0.41)
Body Mass Index at booking	-0.04 (-0.21-0.124)
Ethnicity	
South Asian origin (reference)	1
White British	0.36 (-1.41-2.12)
Other ethnicity	0.89 (-1.22 – 2.99)

Note: no predictors significant

Table 3.3 Six-month follow-up data

Variable	All N=83	Intervention N=42	Control N=41
Age of child at time of questionnaire (months)	6.2 (0.6)	6.3 (0.6)	6.1 (0.5)
Child's length available	15 (18.1)	7 (16.6%)	8 (19.5)
Child's weight available	57 (68.7)	31 (73.8)	26 (63.4)
Child diet			
Child ever breastfed	58 (69.9)	31 (73.8)	27 (65.9)
Child still being breastfed	23 (27.7)	14 (33.3)	9 (21.9)
Duration of breastfeeding (weeks – of those who reported cessation of breastfeeding) [$]	4.0 (1.0, 12.9)	3.0 (2.0, 8.6)	4.7 (0.1, 14.9)
Age given formula (weeks) [$] Not had formula	0.3 (0.1, 4.0) 10 (12.1)	0.4 (0.1, 4.2) 6 (14.3)	0.1 (0.1, 2.0) 4 (9.8)
Age given sweetened drinks (weeks) [$] Not had sweetened drinks	21.5 (17.2, 21.5) 58 (69.9)	21.5 (17.2, 25.8) 28 (66.7)	21.5 (17.2, 21.5) 30 (73.2)
Age given solids (weeks) [$] Not had solids	21.5 (17.2, 25.8) 6 (7.2)	21.5 (17.2, 25.8) 4 (9.5)	21.5 (17.2, 25.8) 2 (4.9)

Variable	All N=83	Intervention N=42	Control N=41
Age introduced to a feeding cup (weeks)	5.0 (0.9)	5.0 (1.0)	5.0 (0.8)
Not used feeding cup	38 (45.8)	17 (40.5)	21 (51.2)
Maternal physical activity			
Hours spent sitting each week day$	3.5 (2.3, 5.3)	3.7 (2.2, 5.6)	3.3 (2.3, 5.0)
Missing	1 (1.2)	1 (2.4)	0
Hours spent sitting each weekend day$	3.6 (2.3, 6.0)	3.7 (2.3, 6.0)	3.5 (2.3, 6.0)
Missing	1 (1.2)	1 (2.4)	0
Child physical activity			
Ever spent time on tummy whilst awake			
Yes	79 (95.2)	40 (95.2)	39 (95.1)
Missing	1 (1.2)	0	1 (2.4)
Age started spending time on tummy (weeks) $	17.2 (10.0, 21.5)	17.2 (8.6, 21.5)	17.2 (12.9, 21.5)
Minutes per day spent on tummy$	20.0 (5.0, 70.0)	30.0 (6.1, 90.0)	10.7 (3.6, 60.0)
Minutes per day spent in front of TV$	17.5 (0.7, 40.0)	30.0 (1.1, 60.0)	10.4 (0.5, 30.0)
Child development			
Returned ages and stages questionnaire			
Yes	32 (38.5)	15 (35.7)	17 (41.4)
Health Economic Measures			
Use of Hospital Services			
Had overnight stay in hospital			
Yes	18 (21.6)	12 (28.6)	6 (14.6)
Missing	1 (1.2)		1 (2.4)
Had outpatient appointment			
Yes	22 (26.5)	13 (31.0)	9 (21.9)
Missing	1 (1.2)		1 (2.4)
Had A&E Attendance			
Yes	23 (27.7)	14 (33.3)	9 (21.9)
Missing	1 (1.2)		1 (2.4)
Use of services outside the hospital			
General practitioner (at the surgery)			
Used	79 (95.2)	41 (97.6)	38 (92.7)
Missing	1 (1.2)	0	1 (2.4)
General practitioner (at your home)			
Used	1 (1.2)	0	1 (2.4)
Missing	1 (1.2)		1 (2.4)

Variable	All N=83	Intervention N=42	Control N=41
Practice nurse (at GP surgery)			
Used	67 (80.7)	33 (78.6)	34 (82.9)
Missing	1 (1.2)	0	1 (2.4)
Midwife			
Used	67 (80.7)	33 (78.6)	34 (82.9)
Missing	1 (1.2)	0	1 (2.4)
Midwife support worker			
Used	8 (9.6)	6 (14.3)	2 (4.9)
Missing	1 (1.2)	0	1 (2.4)
Health visitor (home visits)			
Used	79 (95.2)	40 (95.2)	39 (95.1)
Missing	1 (1.2)	0	1 (2.4)
Health visitor support worker (home visits)			
Used	10 (12.1)	34 (81.0)	36 (87.8)
Missing	1 (1.2)	0	1 (2.4)
Physiotherapy			
Used	4 (4.8)	2 (4.8)	2 (4.9)
Missing	0 (1.2)	0	1 (2.4)
Child health clinics			
Used	27 (32.5)	14 (33.3)	13 (31.7)
Missing	1 (1.2)	0	1 (2.4)
Children's Centre			
Used	29 (34.9)	13 (31.0)	16 (39.0)
Missing	1 (1.2)	0	1 (2.4)
Gym			
Used	6 (7.2)	2 (4.8)	4 (9.8)
Missing	1 (1.2)	0	1 (2.4)
Used other services			
Used	3 (3.6)	1 (2.4)	2 (4.9)
Missing	1 (1.2)	0	1 (2.4)
Have you had any out of pockets health related expenses over the last 6 months			
Yes	35 (42.2)	21 (50.0)	14 (34.2)
Missing	1 (1.2)	0	1 (2.4)

NB Data are mean (SD), n (%) or median (IQR) unless otherwise stated. The latter is denoted with [$]

Table 3.4 Twelve month follow-up data

Variable	All (N=85)	Intervention (N=39)	Control (N=46)
Mothers' BMI $^\$$	29.0 (26.0, 32.0)	28.0 (26.0, 30.0)	29.0 (26.0, 33.0)
Missing	3 (3.5)	1 (2.6)	2 (4.3)
Maternal diet			
Daily fruit and vegetable intake $^\$$	4.0 (2.0, 7.0)	5.0 (2.0, 9.0)	4.0 (2.0, 7.0)
Foods present in the home			
Fruit	85 (100.0)	39 (100.0)	46 (100.0)
Vegetables	85 (100.0)	39 (100.0)	46 (100.0)
Snacks	83 (97.7)	39 (100.0)	44 (95.7)
Fizzy drinks (exc. Diet drinks)	75 (88.2)	36 (92.3)	39 (84.8)
Quantity of foods present in the home (portions)			
Fruit $^\$$	7.0 (5.0, 9.0)	7.0 (5.0, 9.0)	7.0 (6.0, 8.0)
Vegetables $^\$$	8.0 (6.0, 9.0)	8.0 (6.0, 10.0)	8.0 (7.0, 9.0)
Snacks $^\$$	5.0 (4.0, 6.0)	5.0 (3.0, 6.0)	4.0 (4.0, 5.0)
Fizzy drinks (exc. Diet drinks) $^\$$	2.0 (1.0, 2.0)	2.0 (1.0, 2.0)	2.0 (1.0, 2.0)
Food frequency questionnaire: completed	80	36	44
Formula (per day)	0.0 (0.0, 2.0)	0.0 (0.0, 2.0)	0.2 (0.0, 2.9)
Commercial savoury baby meals (per week)	0.0 (0.0, 2.5)	0.0 (0.0, 3.0)	0.0 (0.0, 2.0)
Commercial sweet baby meals (per week)	0.0 (0.0, 0.0)	0.0 (0.0, 2.0)	0.0 (0.0, 0.0)
Chips, roast and potato shapes (per week)	1.0 (0.0, 2.0)	1.0 (0.0, 2.0)	1.0 (0.0, 2.0)
Processed meat products (per week)	0.3 (0.0, 2.0)	0.0 (0.0, 2.0)	0.5 (0.0, 2.5)
Vegetables (per day)	1.6 (1.0, 2.5)	1.6 (1.1, 2.7)	1.6 (0.8, 2.4)
Fruit (per day)	1.8 (1.0, 2.9)	1.7 (1.0, 2.2)	1.9 (1.0, 3.1)
Sweet snacks (per day)	0.6 (0.1, 1.2)	0.3 (0.1, 1.3)	0.6 (0.2, 1.1)
Savoury snacks (per week)	0.0 (0.0, 2.0)	0.0 (0.0, 1.5)	0.0 (0.0, 2.0)
Sugar sweetened drinks (per week)	2.0 (0.0, 7.5)	1.5 (0.0, 11.0)	2.0 (0.0, 7.0)
Pure fruit juice (per week)	0.5 (0.0, 7.0)	0.3 (0.0, 5.0)	0.7 (0.0, 7.0)
Low sugar drinks (per week)	0.0 (0.0, 0.0)	0.0 (0.0, 0.0)	0.0 (0.0, 0.0)
Water (per day)	3.0 (2.0, 4.0)	3.5 (2.0, 5.0)	3.0 (2.0, 4.0)
Maternal physical activity			
Hours spent sitting each week day $^\$$	5.4 (3.3, 7.3)	6.0 (3.8, 8.0)	4.3 (3.0, 7.0)
Hours spent sitting each weekend day $^\$$	5.0 (3.0, 7.8)	4.8 (3.0, 8.5)	5.0 (3.0, 7.5)
Accelerometry			
Mothers			
Number accepting an accelerometer	78	34	44
Number who wore belt for at least 7 hours on at least 3 days	28 (35.9)	10 (29.4)	18 (40.9)
Median moderate – vigorous physical activity minutes per day (of those who wore belt)	13.8 (9.3, 33.0)	20.3 (9.6, 38.9)	13.6 (9.0, 23.7)
Median sedentary minutes per day (of those who wore belt)	356. (297.5, 404.2)	338.3 (258.2, 386.0)	370.7 (303.3, 408.7)
Children			

Variable	All (N=85)	Intervention (N=39)	Control (N=46)
Number consenting to child wear an accelerometer[1]	73	31	41
Number children who wore belt for at least 5 hours on at least 3 days	33 (45.8)	10 (32.2)	23 (56.1)
Median counts per minute (of those who wore belt)	230.9 (176.2, 385.6)	183.7 (134.7, 198.8)	284.8 (196.9, 406.8)
Child diet			
Child ever breastfed	60 (70.6)	28 (71.8)	32 (69.6)
Duration of breastfeeding (weeks) $	8.6 (4.0, 17.2)	7.8 (4.0, 17.2)	8.6 (3.0, 17.2)
Age introduced to solid food (weeks)	24.3 (5.0)	24.7 (5.5)	24.0 (4.6)
Child development			
'Normal' motor development (ASQ)	70 (84.0)	31 (83.8)	39 (84.8)
Missing	2	2	0
Parenting practices			
Low parental self-efficacy (%)	17 (20.0)	10 (25.6)	7 (15.2)
Low parental warmth (%)	21 (24.7)	8 (20.5)	13 (28.3)
Hostile parenting (%)	17 (20.0)	7 (18.0)	10 (21.7)
Feeding styles			
Concern about the child under eating or becoming underweight$12	1.3 (0.5, 2.3)	1.8 (1.0, 2.5)	1.0 (0.3, 2.0)
Concern about infant's hunger$12	0.3 (0.0, 1.0)	0.3 (0.0, 1.0)	0.3 (0.0, 1.0)
Awareness of infant's cues$13	3.8 (3.3, 4.0)	3.8 (3.0, 4.0)	3.8 (3.3, 4.0)
Concern about the infant becoming overweight or overeating$12	0.0 (0.0, 0.7)	0.3 (0.0, 1.0)	0.0 (0.0, 0.7)
Feeding the infant on schedule$14	2.5 (2.0, 2.5)	2.0 (1.5, 2.5)	2.5 (2.0, 3.0)
Using food to calm the infant$14	1.5 (0.5, 2.0)	1.5 (1.0, 2.5)	1.0 (0.5, 2.0)
Social interaction during feeding$14	2.5 (2.0, 3.0)	3.0 (2.0, 3.0)	2.5 (2.0, 3.5)
Health Economic Measures			
Use of Hospital Services			
Had overnight stay in hospital			
Yes	7 (8.2)	3 (7.7)	4 (8.6)
Missing	0	0	0
Had outpatient appointment			
Yes	24 (28.2)	10 (25.6)	14 (30.4)
Missing	0	0	0
Had A&E Attendance			
Yes	17 (20.0)	6 (15.4)	11 (23.9)
Missing	0	0	
Use of services outside the hospital			
General practitioner (at the surgery)			
Used	76 (89.4)	35 (89.7)	41 (89.1)
Missing	0	0	0

[1] Due to a clerical error, the accelerometry data of one infant could not be linked to their participant ID, thus we were unable to ascertain whether they were part of the intervention or control group

Variable	All (N=85)	Intervention (N=39)	Control (N=46)
General practitioner (at your home)			
Used	1 (2.6)	1 (2.6)	0
Missing	0	0	0
Practice nurse (at GP surgery)			
Used	55 (64.7)	22 (56.4)	33 (71.7)
Missing	0	0	0
Midwife			
Used	11 (12.9)	6 (15.4)	5 (10.9)
Missing	0	0	0
Midwife support worker			
Used	2 (2.4)	0	2 (4.4)
Missing	0	0	0
Health visitor (home visits)			
Used	36 (42.4)	17 (43.6)	19 (41.3)
Missing	0	0	0
Health visitor support worker (home visits) Used			
Missing	2 (2.6%)	2 (5.1)	0
	0	0	0
Physiotherapy			
Used	8 (9.4)	3 (7.7)	5 (10.9)
Missing	0	0	0
Child health clinics			
Used	18 (21.2)	7 (18.0)	11 (23.9)
Missing	0	0	0
Children's Centre			
Used	30 (35.3)	10 (25.6)	20 (43.5)
Missing	0	0	0
Gym			
Used	10 (11.8)	5 (12.8)	5 (10.9)
Missing	0	0	0
Used other services			
Used	1 (1.2)	1 (2.6)	0
Missing	0	0	0
Have you had any out of pocket health related expenses over the last 6 months			
Yes	18 (21.2)	12 (30.8)	6 (13.0)
Missing	0	0	0
EQ-5D Measure Mobility			
No problems in walking about	75 (88.2)	34 (87.2)	41 (89.1)
Some problems walking about	9 (10.6)	4 (10.3)	5 (10.9)
Confined to bed	1 (1.2)	1 (2.6)	0
Missing	0	0	0
Self care			
No problems with self care	82 (96.5)	37	45
Some problems with self care	3 (3.5)	2	1
Unable to wash or dress my self	0	0	0

Variable	All (N=85)	Intervention (N=39)	Control (N=46)
Missing	0	0	0
Usual activities			
No problems performing usual activities	76 (89.4)	33 (84.6)	43 (93.5)
Some problems performing using activities	9 (10.6)	6 (15.4)	3 (6.5)
Unable to perform usual activities			
Missing	0	0	0
	0	0	0
Pain / Discomfort			
No pain or discomfort	58 (68.2)	24 (61.5)	34 (73.9)
Moderate pain or discomfort	27 (31.8)	15 (38.5)	12 (26.1)
Extreme pain or discomfort	0	0	0
Missing	0	0	0
Anxiety / Depression			
Not anxious or depressed	78 (91.7)	43 (87.1)	44 (95.7)
Moderately anxious or depressed	5 (5.9)	4 (10.3)	1 (2.2)
Extremely anxious or depressed	2 (2.4)	1 (2.6)	1 (2.2)
Missing	0	0	0
How is your health today? (range worst imaginable health state: 0- Best imaginable health state: 100)	67.5 (18.6)	61.4 (17.8)	72.6 (17.9)

Data are mean (SD), n (%) or median (IQR) unless otherwise stated. The latter is denoted with $. [1] Maximum score=4; [2] Higher=more concern; [3] Higher=more aware; [4]Higher=more likely